

09:15:10

OCA PAD AMENDMENT - PROJECT HEADER INFORMATION

09/27/91

Active

Project #: A-54-811	Cost share #: A-54-121	Rev #: 1
Center #: 10/46-6-U5037-4A0	Center shr #: 10/46-1-K5037-4A0	OCA file #:
		Work type : SS
Contract#: G008715838-91	Mod #: ADMIN REV	Document : GRANT
Prime #:		Contract entity: GIT
Subprojects ? : N		CFDA: 84.055
Main project #:		PE #:

Project unit:	GRAD STUD	Unit code: 03.010.461
Project director(s):		
GRENGA H E	GRAD STUD	(404)894-5314

Sponsor/division names: US DEPT OF EDUCATION / GENERAL
Sponsor/division codes: 144 / 000

Award period: 911001 to 920930 (performance) 921230 (reports)

Sponsor amount	New this change	Total to date
Contract value	0.00	64,115.00
Funded	0.00	64,115.00
Cost sharing amount		76,570.00

Does subcontracting plan apply?: N

Title: GRADUATE CO-OP PROGRAM - ADMINISTRATION GRANT

PROJECT ADMINISTRATION DATA

OCA contact: Mildred S. Heyser 894-4820

Sponsor technical contact	Sponsor issuing office
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VICKI PAYNE	DELORES GRADDY
(202)732-4405	(202)708-7910

COOPERATIVE EDUCATION PROGRAM GRANTS DIVISION
U.S. DEPARTMENT OF EDUCATION U.S. DEPARTMENT OF EDUCATION
WASHINGTON, D.C. 20202 WASHINGTON, D.C. 20202

Security class (U,C,S,TS) : U ONR resident rep. is ACO (Y/N): N
Defense priority rating : supplemental sheet
Equipment title vests with: Sponsor GIT

Administrative comments -

ADMIN. REVISION TO DECREASE CURRENT COST-SHARE ACCOUNT A-54-121 AND CREATE 4 MORE COST-SHARE ACCOUNTS (A-56-117; S-62-116; E-15-111; C-36-111).



GEORGIA INSTITUTE OF TECHNOLOGY
OFFICE OF CONTRACT ADMINISTRATION

NOTICE OF PROJECT CLOSEOUT

Closeout Notice Date 01/21/93

Project No. A-54-811_____

Center No. 10/46-6-U5037-4A0_

Project Director GRENGA H E_____

School/Lab GRAD STUD_____

Sponsor US DEPT OF EDUCATION/GENERAL_____

Contract/Grant No. G008715838-91_____ Contract Entity GIT_

Prime Contract No. _____

Title GRADUATE CO-OP PROGRAM - ADMINISTRATION GRANT_____

Effective Completion Date 920930 (Performance) 921230 (Reports)

Closeout Actions Required:	Y/N	Date Submitted
Final Invoice or Copy of Final Invoice	Y	_____
Final Report of Inventions and/or Subcontracts	N	_____
Government Property Inventory & Related Certificate	N	_____
Classified Material Certificate	N	_____
Release and Assignment	N	_____
Other _____	N	_____

Comments_____

Subproject Under Main Project No. _____

Continues Project No. _____

Distribution Required:

Project Director	Y
Administrative Network Representative	Y
GTRI Accounting/Grants and Contracts	Y
Procurement/Supply Services	Y
Research Property Management	Y
Research Security Services	N
Reports Coordinator (OCA)	Y
GTRC	N
Project File	Y
Other _____	N
_____	N

COOPERATIVE EDUCATION PROGRAM

PERFORMANCE REPORT - PROGRAM YEAR 1991 - 1992

PART I - TO BE COMPLETED BY ALL GRANTEEES

NAME AND ADDRESS OF GRANTEE	GRANT NUMBER:					
	G008715838-91					
	BUDGET PERIOD COVERED BY REPORT					
	FROM			TO		
	Month	Day	Year	Month	Day	Year
	10	1	91	9	30	92

PART II - TO BE COMPLETED BY ADMINISTRATION AND DEMONSTRATION GRANTEEES

Your answers to each item must reflect the activities and accomplishments of your project for the budget period as entered in Part I. IMPORTANT: EXCEPT FOR ITEM 1 OF THIS PART, PROVIDE DATA IN ITEMS 2 THROUGH 13 ONLY FOR THE FUNDED PORTION OF YOUR CO-OP PROJECT. COUNT ONLY THOSE CO-OP STUDENTS WHO WERE SERVED WITH FEDERAL AND MATCHING FUNDS UNDER YOUR GRANT.

	Responses
1. Give the total number of co-op students enrolled in your entire co-op program, even if they were not served under the terms of your grant. See definition of "enrolled" in the program regulations, section 631.5(b)	505
2. Give the number of students enrolled in your funded co-op project.	505
3. Show the increase (+) or decrease (-) in the number of co-op students enrolled (as shown in item 2) compared with the previous year.	19
4. Give the number (unduplicated headcount) of co-op students your project placed in co-op jobs.	231
5. Show the increase (+) or decrease (-) in the number of co-op students placed (as shown in item 4) compared with the previous year.	(22)
6. Of the number of co-op students enrolled (as shown in item 2), give the number who are also enrolled as certificate and/or degree candidates at your institution.	0

PART II - CONTINUED	RESPONSES
7. Of the number of co-op students enrolled (as shown in item 2), give the number who are enrolled in graduate or professional programs (post-baccalaureate) at your institution.	490
8. Were all co-op students placed in jobs related to their academic programs of study or career objectives? If not, explain in narrative under Part II, item 14.	Yes <u>X</u> No <u> </u>
9. Of the co-op students placed in jobs, how many were placed in unpaid positions? Explain in narrative under Part II, item 14.	0
10. Of the number of students placed in jobs, (as shown in item 4), give (a) the total amount of income co-op students earned from co-op employment during the budget period and (b) the income per student during the same period.	(a) <u>3.5 Million</u> (b) <u>14,380</u>
11. Give the cost per student enrolled in your cooperative education project and the cost per student placement. [Divide the total cost (Federal + institutional costs) of the project by the number of students enrolled, and by the number of students placed in co-op jobs during the past year.]	(a) <u>369</u> (b) <u>741</u> \$373 Per quarter
12. Number of employers (firms/organizations) where students were placed. (This number may be less than the total number of employers with whom the institution has co-op work agreements).	116

PART II - CONTINUED

13. STUDENT CHARACTERISTICS. Give the number of co-op students enrolled in your co-op project and placed in jobs by the following characteristics:
A) Ethno-racial background; B) Gender; and C) Disabled/handicapped.

	NUMBER OF CO-OP STUDENTS	
	Enrolled	Placed in Jobs
A) Ethno-Racial Background		
American Indian/Alaskan Native	0	0
Asian/Pacific Islander	54	24
Black (African American)	45	35
Hispanic	7	2
White (not of Hispanic origin)	399	170
Ethno-Racial Subtotal	505	231
B) Gender		
Female	84	59
Male	421	172
Gender Subtotal	505	231
C) Disabled/Handicapped		

14. Attach a narrative statement comparing your project's objectives and activities, as proposed in your approved grant application, with the level of accomplishment attained for each objective and activity. If a planned objective or activity was not attained or conducted, explain why and what, if any, corrective measures were taken. Also explain the extent of participation of each unit of an Administration grant included in your approved application. Explain, or expand upon, any responses from Part II. Attach a copy of any external evaluation reports prepared for your project during, or immediately after, the budget period.

If this report is for the final budget period of a single- or multi-year approved project, the narrative statement should also summarize the overall accomplishments, strengths, and weaknesses of your project over the entire approved project period. Describe how your co-op program will continue to be implemented in the absence of Federal support.

PART III - TO BE COMPLETED BY TRAINING AND RESOURCE CENTER GRANTEEES

1. On a separate sheet of paper, list each training workshop conducted during the budget period stated in Part I, along with the primary purpose of each workshop, the city and state where workshop was held, the number of persons conducting the training, and the number of participants who attended the training workshops. Give the names of other entities collaborating with you in each of the training workshops.
2. Specify the gross and net incomes from this past year's (most recent budget period) grant activities. Itemize the gross and net income, and the expenditures from such income.
3. Attach a narrative statement comparing the project objectives and activities, as proposed in your approved grant application, with the level of accomplishment attained for each objective and activity. If any objective or activity was not attained or conducted, state the objective or activity and give reasons for changes or slippage. Describe measures taken to achieve objectives that have not been attained.

PART IV - TO BE COMPLETED BY RESEARCH GRANTEEES

1. As proposed for the budget period in Part I, has the research been completed in accordance with the grant agreement? Yes _____ No _____
2. Attach a narrative statement on one of the following:
 - a. If the research has been completed, provide a brief summary of your findings and attach three copies of the final report.
 - b. If you accomplished the objectives of your research project for this budget period in accordance with your grant agreement but the research is still incomplete, explain the current status of the research and give the expected date of completion. (Applies to multi-year grantees.)
 - c. If your objectives were not met, explain the status of your project and reasons why the objectives were not met. Give the reasons for the slippage in the schedule and provide a timetable for completion. Describe measures taken to achieve objectives that have not been attained.

PART V - AUTHORIZED SIGNATURE AND DATE (To be completed by all grantees)

I certify that the information in this report is accurate and complete and that all terms and conditions of the grant have been satisfactorily completed to the best of my knowledge and belief.

Helen E. Grenga

Signature of Authorized Official
Director, Graduate Co-op Program
and Associate Vice President

Typed Name of Authorized Official

December 15, 1992

Title

Date

Georgia Institute of Technology
Graduate Cooperative Program

PERFORMANCE REPORT
Fifth Budget Period
October 1, 1991 - September 30, 1992
E. D. Grant Number G008715838-90

Part II. Narrative

I. Project Accomplishments during the Fifth Budget Period

Project objectives and activities, as given in the grant application, with the level of accomplishment attained during the fifth year are as follows:

A. Emphasize external program development and develop graduate level co-op positions.

An average of 30 Company representatives or technical managers have been visited or have visited Graduate Co-op coordinators each quarter. Approximately 20 Company sites were visited during the year, 10 of these in the state of Georgia with five faculty members involved in these visits.

The Graduate Co-op Program has been promoted through the Corporate Liaison Program which has 30 member companies. Contacts were made through letters, brochures, telephone calls and visits. The employer information pamphlets are widely distributed through various campus offices, including the academic units, Placement Center, Undergraduate Cooperative Division, new faculty and student orientations. Approximately 500 Employer Information Brochures have been distributed this year through mailings and site visits.

There were 116 new companies added to the program this year. For the second year in a row we have lost some companies due to economic conditions and/or mergers. Our total number of companies now stands at 410.

The program coordinator has attended several workshops to enhance Georgia Tech's Graduate Co-op Program by offering the latest ideas and opportunities for our students.

We continued to encourage faculty to become directly involved with students and the companies that employ our students as co-ops. This can lead to new research projects for the professors as well as new jobs for our graduate students.

B. Promote Cooperative Education with Graduate Students.

We continue to advertise the Graduate Co-op Program to the students in the school newspaper with half page ads each quarter as well as posting co-op announcements on the department bulletin boards and sending notices to the students' campus mail boxes. Faculty members also advise their graduate students about the program and its opportunities.

Upon invitation, the program coordinator participated in department orientations to familiarize new students with the benefits of the Graduate Co-op Program. Program information was also presented at graduate student orientations in the fall, winter, spring and summer quarters.

One Japanese company has an employee studying for a master's degree and working with their company as a Graduate Co-op student. We also have coordinated efforts with Georgia Tech's Lorraine, France campus. We are working on co-op placement opportunities for students in France and the U. S.. One student has been placed at a company in France. We expect both programs to expand to include additional companies and additional students.

The coordinator continues to work with the state co-op organization and one of Georgia's predominantly black colleges to increase minority participation in co-op, especially at the graduate level. He has also met with various minority student campus organizations and attended national meetings in regard to minority participation.

Brochures and posters are widely distributed through schools and companies. In the Information Section for Graduate Students, the General Catalog contains basic information regarding the program requirements and instructions for obtaining additional information or an application. The Graduate Application form also has space for the student to request information on the Graduate Co-op Program. The Graduate On-Line Information and Application to Tech (GOLIATH) also has information about the Graduate Co-op Program, and students applying for graduate school by computer can ask for a Graduate Co-op application also.

C. Involve Faculty at a High Level of Participation

The Graduate Co-op Staff met periodically with the Co-op Faculty Coordinators, Prof. Kurt Eiselt and Lanny Feorene, to discuss program status and develop strategies for program development.

One of the Co-op Faculty Coordinators was instrumental in developing our Graduate Co-op Advisory Board which held its first meeting in October 1991. The Board includes high level technical managers from 13 companies and 1 government agency. A number of excellent recommendations resulted from the first meeting. These recommendations have been acted upon.

Faculty have continued to take active participation in the Graduate Co-op Program by visiting students who are on work assignment. This has increased the faculty awareness as well as demonstrated to the companies that our faculty take special interest in the students' work projects.

Faculty involvement occurs continuously through the year. The co-op office frequently coordinates meetings between faculty members and company representatives both on-campus and at the company site. There have been over 75 such contacts initiated during this year.

Five faculty members have been involved in at least 25 on- and off-campus visits with company representatives. Ten of these visits were to the company sites.

D. Provide Career Counseling for Students

Students seek advisement in regard to selecting companies for their co-op work assignments. The staff must be knowledgeable and informed about the companies as well as the opportunities available to the students.

Students are advised about co-op opportunities upon completing the application/resume form which is submitted to their graduate coordinator or school director for approval. Graduate students are able to complete their master's degree in about 6 quarters. If the student has a highly specialized major, requiring a critical class sequence, this may limit the co-op opportunities. Thus, advisement from counselors and the co-op staff is especially important to obtain appropriate placement during the relatively brief time the student is available.

The students submit prioritized lists of companies in which they are interested. Students are encouraged to research new companies and to involve professors when seeking company information. Professors actively participate in recommending job opportunities for the students. A learning contract is developed by creating a closer involvement between students, faculty members, company representatives and the Co-op Office. The student plans and submits a study-work schedule prior to beginning the first co-op work quarter. This schedule helps to keep the departments and the co-op office informed as to the students' intended plans for completing their degree requirements as well as the graduate co-op work requirements.

A library of information concerning co-op opportunities, including job descriptions and company literature is located in the Graduate Co-op Office. Companies are contacted annually to update this information. The co-op library and the larger Placement Center library are both used by the students to help clarify their career interests as well as to identify companies and/or specific jobs of interest. The Graduate Co-op Office has subscribed to several publications and makes these publications available to the students to enhance their co-op job research opportunities.

E. Stress Academic Enrichment and Achievement

The Graduate Cooperative program is designed purposefully to incorporate maximum flexibility in order for the faculty and students to use it for maximum benefit with respect to the academic programs while at the same time offering companies a variety of ways to participate in the educational process through this program.

In some cases, the graduate co-op program is similar to the traditional undergraduate model by offering students academic enrichment through industrial experience with financial rewards on alternating work periods. However, students have the alternative to work 6 month periods. Several students have accepted a one-year assignment to work and/or conduct research outside the U. S. Non co-op students have received some benefits of the graduate co-op program through classroom experiences with students who return from an industrial environment.

The Graduate Cooperative Program is used to obtain academic credit if the student does some or all of the thesis research or special problem assignment at work. In these cases, faculty members are directly involved with the company supervisors of the students.

A company may choose to sponsor a research grant in which a graduate co-op student is the research assistant performing thesis research while at school; the student then spends work periods with the sponsoring company to become more informed about the application of the research. This gives a student the opportunity to get direct input from a faculty advisor as well as involvement in industry.

Visits are regularly made to companies employing graduate co-op students to assess the quality of the co-op work experience and to provide helpful suggestions to employers as well as get feedback from the company supervisors and managers who evaluate the student's performance. This year 20 visits were made to co-op employment sites.

F. Ensure Growth of the Graduate Co-op Program

The Graduate Co-op Program has been successful in attracting a large number of Ph.D. as well as Masters students. Two hundred and eighty-eight students have been awarded Graduate Co-op Certificates with their M.S. degrees. Currently, we have 109 Ph.D. students enrolled. Thus far, we have awarded Graduate Co-op Certificates to 24 students who graduated with a Ph.D. degree from Georgia Tech. The first was awarded in 1987, three in 1989, five in 1990, four in 1991, and eleven in 1992. Each of the twenty-four Ph.D. students worked for a different company. As a result of the performance of these students, we have been able to place additional graduate co-op students with some of these same companies.

Efforts to increase the number of student and company participants during this fifth project year have been successful, as the following statistics show:

Students:

Number applicants	375
Number accepted	360
Total program enrollment	505
Number new students placed	120
Total students placed (unduplicated headcount)	231
Total number students work quarters/placements	446
Total earnings by co-op work (approx.)	3.5 Million

Companies:

Number of new companies	116
Total number companies	410
Number companies with new placement	79
Total number companies with placement	136

A comparison of these numbers with the stated grant objectives for 1991-92, as updated in last year's continuation proposal (12/91) shows that the fifth project year exceeded goals in all areas except total number of enrolled students and total students placed on work quarters.

Co-op student enrollment (505) was less than expected (600). However, this was an increase of 4% over last year's student enrollment figures. There was also an increase in the number of employers with co-op students (136) and the number of student work quarters (446). These figures exceeded the stated goals of 90 and 375 respectfully.

The decline in co-op placements is directly related to the economy. In some cases, employers have become initially more selective in their utilization of co-ops. These dynamics invariably demand more contact hours with potential co-op employers to familiarize them with the program and its short and long range benefits.

It is strongly recommended that another full-time professional staff person (i.e., coordinator) be added to maximize the effectiveness of the overall program. In turn, this would reduce the student-coordinator ratio from 500 to 1 to a realistic 250 to 1. This ratio would allow for more productive interaction among students, faculty and corporate personnel. The Associate Vice President recognizes and supports this need. An additional person is being requested through the Graduate Office Strategic Plan.

II. Project Accomplishments During the Five-Year Budget Period

Overall Accomplishments Over Five Year Budget Period

The Graduate Co-op Program was successful in accomplishing many of its five-year goals and objectives. During this five-year period, the program was able to substantially increase activities in the external program development arena. Strong mutually beneficial relationships were formed between company representatives, graduate co-op coordinators, faculty and the Graduate Co-op Program. Faculty have been directly involved with companies that employ our students as co-ops. In several instances, faculty have been able to establish research projects with these companies.

The number of new companies added to the co-op program grew each year to a record level of 116 (1991-92). Recent declines in the economic conditions have forced some employers to terminate participation in co-op and others to limit the number of students hired. Consequently, placement numbers were down from the projected goal. However, this has provided opportunities for students to be placed with more new companies.

The Graduate Co-op Program is constantly being promoted to students, staff and faculty. Enrollment figures have shown sharp increases because of these promotional efforts. In addition, the coordinator participates in quarterly department orientation sessions to familiarize graduate students with the program and its opportunities.

The Graduate Co-op Program has been successful in attracting large numbers of PhD students as well as Masters. Over the five-year period, twenty-four PhD students were awarded graduate co-op certificates. African American student participation in graduate co-op has increased over 200%. Currently, thirty-five African American students are placed in graduate co-op jobs for 1991-92. In addition, the graduate co-op program has been included in several institutional initiatives for minority recruitment.

The Graduate Co-op Program has two student representatives in the Graduate Student Government. They develop activities to encourage increased enrollment of graduate students in the co-op program. Minority and under-represented groups are especially targeted. One of our student representatives is an African American female. We will continue to include minority and under-represented candidates in the selection process for our Graduate Student Government representatives.

In the absence of Federal support, the Graduate Co-op Program will continue to be implemented through the support of Georgia Tech. The program has had strong institutional support since its establishment in December, 1983. Both the president and top administrative officers are committed to the co-op concept and have pledged their continued financial support of an expanded co-op program at Georgia Tech. The Institute's 1991-92 Strategic Plan calls for the expanding of the co-op program by adding an additional professional staff person. This is indicative of the program being perceived as an integral component of the Institute's liaison efforts with industry and research.

Five Year Summary Report (Continued)

PART II - CONTINUED	10/87-9/88	10/88-9/89	10/89-9/90	10/90-9/91	10/91-9/92
7. Of the number of co-op students enrolled (as shown in item 2), give the number who are enrolled in graduate or professional programs (post-baccalaureate) at your institution.	221	309	512	470	490
8. Were all co-op students placed in jobs related to their academic programs of study or career objectives? If not, explain in narrative under Part II, item 14.	Yes	Yes	Yes	Yes	Yes
9. Of the co-op students placed in jobs, how many were placed in unpaid positions? Explain in narrative under Part II, item 14.	0	0	0	0	0
10. Of the number of students placed in jobs, (as shown in item 4), give (a) the total amount of income co-op students earned from co-op employment during the budget period and (b) the income per student during the same period.	1.7 Million	Greater than 2.0 Million	3.0 Million	(a) 3.7 Mil (b) \$13,553	(a) 3.5 Millio (b) \$14,38
11. Give the cost per student enrolled in your cooperative education project and the cost per student placement. [Divide the total cost (Federal + institutional costs) of the project by the number of students enrolled, and by the number of students placed in co-op jobs during the past year.]	N/A	N/A	N/A	(a) \$385 (b) \$739 un- duplicated \$390 per quarter	(a) 369 (b) 741 373 per qtr.
12. Number of employers (firms/organizations) where students were placed. (This number may be less than the total number of employers with whom the institution has co-op work agreements).	98	78	106	91	116